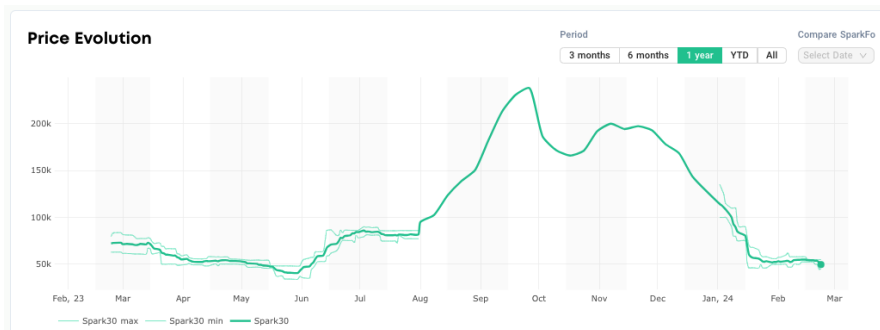




ATLANTIC LNG FREIGHT RATES DROP BELOW \$50,000 PER DAY, EUROPEAN PRICES DOWN

Atlantic spot LNG freight rates dropped below \$50,000 per day this week, while European and Asian prices also decreased compared to the week before. Last week, charter rates were almost flat after they rose in the week before for the first time



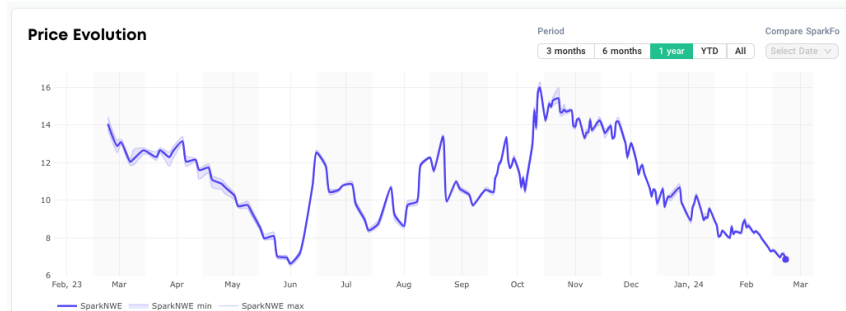
since mid-November 2023. “The Spark30S Atlantic spot 174,000 cbm 2 Stroke LNG freight rate fell to the lowest level in 8 months, falling \$4,750 this week to close at \$49,750 per day as the spot fixing window moves into the seasonally softer Q2 period,” Henry Bennett, Spark’s COO, told LNG Prime on

Friday. He said the Spark25S Pacific spot rate was almost unchanged on the week at \$58,250 per day. LNG carriers are still avoiding the Suez Canal due to the situation in the Red Sea. Since January, LNG carriers, including Qatari vessels delivering LNG shipments to Europe, are favoring the Cape of Good Hope for safer passage. Kpler said previously that the Suez Canal has witnessed no LNG transits since January 17. On the other hand, due to a drought situation impacting the Panama Canal,

LNG transits through the waterway keep declining. Official data shows that LNG transits dropped to 326 in fiscal 2023 from 374 in 2022 and 537 in 2021.

European and Asian prices decline

In Europe, the SparkNWE DES LNG front month dropped compared to the last week. The NWE DES LNG for March delivery



was assessed last week at \$7.339/MMBtu and at a \$0.535/MMBtu discount to the TTF. “The SparkNWE DES LNG price is hovering just above the low from June 2023 and is sitting at \$6.858/MMBtu, down \$0.481 week on week,” Bennet said. Levels of gas in storages in Europe remain high for this time of the year due to mild

weather. Data by Gas Infrastructure Europe (GIE) shows that gas storages in the EU were 64.69 percent full on February 22. Gas storages were 65.94 percent full on February 14. This week, JKM, the price for LNG cargoes delivered to Northeast Asia, dropped when compared to the last week, according to Platts data. JKM for April settled at \$8.155/MMBtu on Thursday. State-run Japan Organization for Metals and Energy Security (JOGMEC) said in a report earlier this week that the JKM decreased due to sufficient supply and high inventory. METI previously said that Japan’s LNG inventories for power generation as of February 18 stood at 2.13 million tonnes, up from 2.05 million tonnes in the previous week. source : www.lngprime.com

DEUTSCHE REGAS STARTS COMMISSIONING MUKRAN FSRU TERMINAL

LNG terminal operator Deutsche ReGas has kicked off commissioning activities at its FSRU-based LNG import facility in Germany’s port of Mukran. The German firm led by Ingo Wagner and Stephan Knabe on Saturday announced the arrival of the 2021-built 174,000-cbm, Energos Power, in Mukran on the island of Rugen, as well as the receipt of a “permission of early start”, which allows the start of test operations of the terminal. Deutsche ReGas said the FSRU with a regasification capacity of up to 7.5 bcm per year docked at the designated berth 12 in the industrial port of Mukran. The FSRU is carrying a cargo of LNG from Equinor’s Hammerfest LNG terminal in Norway. Energos Power recently loaded the shipment at France’s Montoir during a ship-to-ship operation from the 2023-built 174,000-cbm LNG tanker, Maran Gas Marseille, owned by Maran Gas and chartered by TotalEnergies. Knabe said in the statement that the FSRU would start supplying natural gas from Mukran into the German gas pipeline network this winter. Deutsche ReGas recently told LNG Prime that it expects to launch its FSRU-based LNG import facility by the end of this winter. The aim of the trial operation is to test and commission all onshore and offshore systems. Besides the FSRU, the Mukran project includes the 50-kilometer-long pipeline Ostsee Anbindungsleitung

(OAL). Germany's Gascade built this pipeline which connects the LNG terminal in the port of Mukran with the German gas transmission network in Lubmin.



Two FSRUs : In June last year, Deutsche ReGas signed a deal with the German government to sub-charter the FSRU delivered in 2021 by Hudong-Zhonghua. Deutsche ReGas took over the charter of Energos Power in October and the vessel has been working as an LNG carrier since then. In the meantime, the FSRU, previously named Transgas Power, changed its owner as Greece's Dynagas sold the vessel to US-based Energos Infrastructure, owned by asset

manager Apollo. Energos Power will work along the FSRU Neptune in Mukran as part of the second phase of the LNG terminal with a capacity of up to 13.5 bcm per year. Deutsche ReGas officially launched its Lubmin FSRU-based LNG import terminal, first private LNG terminal in Germany, in January last year. It chartered the 2009-built 145,000-cbm, FSRU Neptune, from French energy giant TotalEnergies for this project. Deutsche ReGas said on Saturday that Neptune is expected to leave the port in Lubmin in the spring of this year. Following necessary refitting work, this FSRU is expected to start operations in Mukran in the summer. Deutsche Regas said the relocation of the FSRU means there is no longer a need for LNG shuttle services in the Greifswald Bodden to Lubmin. The firm previously chartered three small LNG carriers from Anthony Veder to transport LNG from the FSU Seapeak Hispania to the FSRU due to draft restrictions in Lubmin. The 137,814-cbm LNG carrier Seapeak Hispania located off Rugen will also leave in the coming months, it said. source : www.lngprime.com

QATARENERGY TO FURTHER BOOST LNG OUTPUT

State-owned LNG giant QatarEnergy said on Sunday it will further boost its liquefied natural gas production from the North Field. Qatar's energy minister and chief executive of QatarEnergy, Saad Sherida Al-Kaabi, made the announcement during a press conference held at QatarEnergy's headquarters in Doha. The new project, called the North Field West project, will add 16 million tonnes of LNG to the overall expansion of the North Field to a total of 142 mtpa before the end of 2030. Al-Kaabi said that extensive appraisal drilling and testing have confirmed that productive layers of Qatar's giant North Field extend towards the west, which allows for developing a new LNG production project in Ras Laffan. According to Al-Kaabi, this represents an increase of almost 85 percent from current production levels.

"Huge" additional gas quantities

Al-Kaabi said that QatarEnergy has focused its efforts and attention on determining how far west the North Field's productive layers extend in order to evaluate the production potential from those areas. "We have continued geological and engineering

studies and have drilled a number of appraisal wells in that area. I am pleased today to announce that these great efforts have confirmed, through technical tests of the appraisal wells, the extension of the North Field's productive layers further towards the west, which means the ability to produce significant additional quantities of gas from this new sector," he said

Al-Kaabi also announced the presence of "huge" additional gas quantities in the North Field estimated at 240 trillion cubic feet, which raises Qatar's gas reserves from 1,760 to more than 2,000 trillion cubic feet, and the condensates reserves from 70 to more than 80 billion barrels, in addition to large quantities of liquefied petroleum gas, ethane, and helium. "These are very important results of great dimensions that will take Qatar's gas industry to new horizons, as they will enable us to begin developing a new LNG project from the North Field's western sector with a production capacity of about 16 mtpa," he said.

He said that QatarEnergy would immediately start the basic engineering works necessary to ensure that the planned progress is achieved according to the approved schedule for this new project.

LNG expansion

QatarEnergy is currently building the North Field East and North Field South expansion projects. The LNG giant officially started construction on its North Field expansion project in the giant Ras Laffan complex in October last year. QatarEnergy's partners in the project are Shell, ConocoPhillips, ExxonMobil, TotalEnergies, Eni, Sinopec, and CNPC. The project includes six mega trains, each with a production capacity of 8 mtpa of LNG, four of which are part of the North Field East expansion project, and two are part of the North Field South expansion project. Technip and Chiyoda won the EPC award for the North Field East project, while QatarEnergy awarded the contract for the North Field South project to a joint venture of Technip Energies and Consolidated Contractors Company. QatarEnergy LNG, previously known as Qatargas, currently operates 14 LNG production trains with a capacity of about 77 mtpa in Ras Laffan. This year, QatarEnergy signed LNG supply deals with India's Petronet LNG and US FSRU player Exceleerate Energy. Prior to these deals, QatarEnergy signed huge contracts in 2023. These large deals include 27-year SPAs with Sinopec, Eni, Shell, and TotalEnergies. source : www.lngprime.com

MARINAKIS TIED TO 'RECORD PRICE' LNG NEWBUILDINGS

Capital Group's billion-dollar quartet scheduled for delivery in 2028. Evangelos Marinakis' private company Capital Group is being named as the shipowner behind a \$1bn-plus order for LNG carriers in South Korea. HD Korea Shipbuilding & Offshore Engineering announced on Monday that it has received an order for four 174,000-cbm newbuildings worth KRW 1.43tn (\$1.08bn), or \$270m per ship. Its Mokpo-based Hyundai Samho Heavy Industries will build the quartet and deliver it in 2028. HD KSOE did not name the contracting party, referring to it only as "an Oceanian shipper". Shipbuilding sources following HD KSOE's newbuilding activities told TradeWinds that Capital Group is behind the order. While the four are all firm vessels, it is not known if the contract includes any options.

Slots scarcity

Capital Group has been contacted for comment. This contract brings the total number of newbuildings that the Greek company has on order at HD KSOE to 13. Its earlier nine gas carriers, ordered between 2021 and the beginning of 2023, are set to be delivered by 2027. Brokers said Capital Group’s latest four newbuildings have set a record price for LNG carriers, stressing that these ships will only be delivered four years down the road. One shipbuilding observer said prices of new LNG carriers are still firm even though steel plate costs have dropped by around 20% since the beginning of the year. “The last deal at a South Korean yard, excluding QatarEnergy’s related newbuildings, was done at around \$267m per ship. We think the newbuilding price of LNG carriers will continue to increase due to slots scarcity at shipyards,” said the observer. London broker Clarkson’s Shipping Intelligence Network shows the LNG carrier orderbook standing at 340, of which 17 units were ordered this year. These figures do not take into account Capital’s latest order. Market sources say there is strong interest in new vessels, with several new LNG projects under development. HD KSOE is the holding company of HD Hyundai Heavy Industries, Hyundai Samho Heavy Industries and Hyundai Mipo Dockyard. The group has now signed contracts for 46 newbuildings worth \$5.98bn this year — 44.3% of its annual target of \$13.5bn. source : www.tradewindsnews.com

MOL’S ARC7 CARRIERS FOR RUSSIA DELAYED BUT NOT FACING SANCTIONS

Ship deliveries for the Arctic LNG project set back due to labour issues at South Korean yards, owner says. A trio of ice-breaking Arc7 LNG carriers being built by Japan’s Mitsui OSK Lines for Russia’s Arctic LNG 2 project have not been included under the US’ sweeping new sanctions package announced on Friday last week but are being delayed at shipbuilder Hanwha Ocean. Answering questions from TradeWinds, MOL said: “We are aware that the US/EU/UK’s new package of sanctions was announced last Friday and a number of Sovcomflot-related vessels were sanctioned by the US. “Our three ice-breaking vessels were not on the sanction list,” the company clarified. The 172,600-cbm trio was ordered in September 2020 against long-term contracts with Russian energy company Novatek, which is leading the development of the under-construction Arctic LNG 2 project. The Japanese owner said at the time that the charter deals had been signed by a subsidiary with Novatek Gas & Power Asia. MOL said the delivery times for the three ships have now been delayed but did not disclose new handover dates. The company said this is due to labour force shortages at the shipyard — a problem it said is being experienced by all South Korean yards, including Hanwha Ocean. In 2020, the company said all three ships were scheduled for handover in 2024. “We are not seeing immediate effect to the three vessels from the newly announced sanctions,” MOL said. Compliance commitment : “MOL will continue to comply with laws and regulations, including sanctions taken by the international community, and will take appropriate measures in cooperation with stakeholders, including the Japanese government.”

Clarksons Shipping Intelligence Network currently lists the vessels — the Ilya Mechnikov, Nikolay Semenov and Nikolay Basov — as due for handover in March 2024, with the final vessel for delivery in 2026. Speaking in India in February, MOL president and chief executive Takeshi Hashimoto was asked about its three Arc7 LNG newbuildings. “Our contractual obligation is that if we cannot provide the service to Arctic 2, we have to sell our vessel to Arctic 2,” Hashimoto said. But he added: “There is a sanction that says we should not do that deal with Arctic. So it’s a bit complicated.” On Friday last week — on the eve of the second anniversary of Russia’s invasion of Ukraine and following the death in custody of Russian government critic Alexei Navalny — the US rolled out a swathe of new sanctions against Russian companies, persons and ships. These included a trio of Arc7 vessels that were originally contracted by Russian shipowner Sovcomflot against long-term time charters with Novatek. Sanctions sweep : The US Treasury Department’s Office of Foreign Assets Control included Elixon Shipping, Azoria Shipping and Glorina Shipping on its new sanctions list. These are the three single-purpose shipowning entities of three Arc7 newbuildings under construction at Hanwha Ocean that were originally contracted by Sovcomflot. Hanwha Ocean, then Daewoo Shipbuilding & Marine Engineering, cancelled the newbuilding contracts on all three Sovcomflot ships in 2022 as Western sanctions against Russia made it increasingly difficult for foreign equipment suppliers and contractors to work on the vessels. The shipbuilder, which is now controlled by Hanwha Group, opted to continue building the trio for its own account. Ofac also listed Smart LNG — a joint venture between Sovcomflot and energy company Novatek — as a sanctioned entity. The company was to own all but one of the 21 LNG carrier newbuildings for Arctic LNG 2. Zvezda Shipbuilding Complex, which is completing a further five of the Arc7 newbuildings for Arctic LNG 2, was also named as a sanctioned entity by the US. A contract with Samsung Heavy Industries on 10 more LNG newbuildings that were to be completed by Zvezda has been “suspended”, SHI recently clarified to TradeWinds. The UK and European Union have also slapped sanctions on Russia’s Arctic LNG 2. Source :

www.tradewindsnews.com

PROJECT DEMAND TO SOAK UP 95 NEWBUILDS

Company reveals that QatarEnergy is expected to boost its Q-Max orders to 18 vessels. Up to 95 vessels need to be ordered to fulfil the needs for the contracted supply of LNG plants under construction, according to French membrane-type cargo containment system designer GTT. Answering questions in its full-year results briefing, CEO Philippe Berterottiere said he expects there to be around 18 Q-Maxes ordered by Qatar — newbuilding contracts on just eight have been signed to date — but he said this would not affect its estimates of vessels needed. GTT expects more orders for 200,000-cbm ships, contributing to CO₂ emission reductions in the future. Berterottiere said the sector’s ageing fleet is another driver for vessel demand. He said close to 60 ships are trading that were built before 2000 and nearly 230 steam turbine vessels are in operation burning twice the amount of fuel of modern LNG carriers. About 60% of ships have cargo boil-off rates that are “significantly higher” than new ships, he added. Under the pressure of new regulations these vessels will have to be replaced, he said, which the

company thinks will prompt an acceleration of scrapping. But this has “not really begun” yet. GTT, which this week is celebrating the 10th anniversary of its IPO, upped its long-term estimates for LNG carrier demand over the next 10 years from 400 to more than 450. It also increased its forecast for floating LNG production vessels from up to five to 10. Berterottiere said 2023 had proved another bumper year — GTT’s next-highest in orders after 2022, which was its record year. He highlighted that final investment decisions had been taken on 56m tonnes of new liquefaction capacity. Berterottiere said a strong start has also been made in 2024, with QatarEnergy announcing at the weekend that it will be moving ahead with a further 16m tonnes per annum expansion plan that will boost its production to 142 mtpa by the end of this decade. Speaking about new developments, innovation director Jean-Baptiste Boutillier revealed that the company is also working on a 200,000-cbm LNG vessel with slow steaming to reduce CO₂ emissions. This is in addition to a three-tank, 174,000-cbm design that it rolled out in 2023. Boutillier said GTT is working on its new cargo containment system Next1 and finished tests on this at the end of 2023. He said GTT is adapting its LNG as a fuel business for VLCCs and pure car/truck carriers. source : www.tradewindsnews.com

QATAR TO BOOST LNG PRODUCTION BY 85% BY 2030

State-owned firm QatarEnergy has announced it is proceeding with a new LNG expansion project, the North Field West project, to further raise the country’s gas production capacity to 142M tonnes per annum (mta) before the end of this decade

Extensive appraisal drilling and testing have confirmed that productive layers of Qatar’s giant North Field extend towards the west, which allows for developing a new production project in Ras Laffan. Qatar’s Minister of State for Energy Affairs and President and chief executive of QatarEnergy, Saad Sherida Al-Kaabi, made the announcement at a press conference in Doha on 25 February. The minister said, “We have continued geological and engineering studies and have drilled a number of appraisal wells in that area. I am pleased to announce that these great efforts have confirmed, through technical tests of the appraisal wells, the extension of the North Field’s productive layers further towards the west, which means the ability to produce significant additional quantities of gas from this new sector.” The additional gas quantities in the North Field are estimated at 240 Trn cubic feet, which raises Qatar’s gas reserves from 1,760 to more than 2,000 Trn cubic feet, and the condensates reserves from 70 to more than 80Bn barrels, in addition to large quantities of liquefied petroleum gas, ethane and helium. Minister Al-Kaabi said, “These are very important results of great dimensions that will take Qatar’s gas industry to new horizons, as they will enable us to begin developing a new LNG project from the North Field’s western sector with a production capacity of about 16 mta.” “As such, the State of Qatar’s total LNG production will reach about 142 mta when this new expansion is completed before the end of this decade.” The figure would represent an increase of almost 85% from current production levels and if complete, would see Qatar’s total hydrocarbon production exceed 7.25M barrels of oil equivalent per day. QatarEnergy also recently confirmed it has selected Qatar Gas Transport Co Ltd (Nakilat) to be the owner and operator of up to 25 conventional-size LNG carriers. The orders will be conditional upon the signing of time charterparty (TCPs) agreements by

affiliates of QatarEnergy and Nakilat. QatarEnergy will commence the basic engineering work for the new North Field West project. The news of more capacity in the future comes in the wake of the United States' moratorium on new export permits. Last month, the Biden Administration said it would temporarily pause future LNG export permits, a move that many in the industry perceive as having been influenced by domestic politics as he attempts to win re-election. However, the moratorium is not expected to affect any of the major LNG terminals currently being built. At least five major export terminals are coming online on the Gulf Coast and there are other major projects in Canada and Mexico. The United States is now the world's largest exporter of LNG and a continued increase in supply is likely with global demand growing. source : www.rivieramm.com

SOVCOMFLOT, ARCTIC LNG 2 IN THE CROSSHAIRS OF NEW SANCTIONS

Russia's leading tanker group Sovcomflot is the target of another round of Western sanctions . The Treasury's Office of Foreign Asset Control (OFAC) has designated 14 crude oil tanker vessels as property in which Sovcomflot has an interest, hoping to add greater costs to the company shipping its crude oil and associated products. The sanctions will freeze any US assets of listed entities and bars Americans from dealing with them. Coming on the eve of the two-year mark of Russia's invasion of Ukraine, the sanctions target hundreds of entities and individuals in Russia and other countries. Washington is looking to clip Russia's revenues from oil sales that can further support the war in Ukraine, the Treasury Department said on Friday. Some of the ships on the list have already faced issues delivering oil to buyers in India. Back in December, Riviera Maritime reported that Krymsk, a Gabon-flagged tanker on the new list, had been stationary off the port of Paradip in the Bay of Bengal for weeks. Two other sanctioned tankers, Georgy Maslov and Anatoly Kolodkin are scheduled to call at Gujarat's Sikka port. AIS data shows Georgy Maslov is due to arrive this week. Anatoly Kolodkin delivered crude at Vadinar Port and is scheduled to call at Sikka in April. The blacklist includes 12 other ships consisting of a drillship, a trio of general cargo ships and research vessels from the fleet of state-owned Rosgeologia, a company that provides geological exploration services. The company that controls Russia's Zvezda Shipbuilding Complex was also sanctioned. The Treasury Department claims this is for the yard's role in Russia's military-industrial manufacturing base.

US sanctions have also targeted Novatek's mammoth 19.8-mta Arctic LNG project.

Novatek and Sovcomflot's joint venture Smart LNG, originally set up to own newbuildings for the Arctic LNG 2 project that were to be built at Zvezda, is now on the sanctions list along with civil engineering firm Novatek Murmansk. In 2023, a round of sanctions targeted Novatek's flagship project, and in November the US Assistant Secretary for Energy Resources Geoffrey Pyatt told the US Senate Foreign Relations Committee, "Our objective is to kill that project. And we are doing that through our sanctions working with our partners in the G7 and beyond." Production from Arctic LNG 2 began in December 2023, even though Novatek had to send force majeure notices to some customers. Major western buyers, among them Shell, Vitol and

Gunvor, have sale and purchase agreements with Novatek. Russia has managed to complete the first production line and says it expects the first cargoes to ship in the next few weeks. Chinese firm Harbin Guanghai Gas Turbine stepped in after US firm Baker Hughes, which had originally been slated to provide turbines, withdrew from the project. The Kremlin has claimed the project remains on track, despite the sanctions. Responding to the latest round of sanctions, spokesman Dmitry Peskov told reporters, "Nothing fundamentally new has been announced, and it is unlikely that anything fundamentally new can be thought up by those who impose these sanctions without harming their own economy." The UK has followed suit and announced its own package of sanctions, some targeting Arctic LNG 2 and its director, Oleg Vyacheslavovich Karpushin. "This is one of the key links in Putin's plan to make Russia a major LNG player," the UK government said. Additionally, six directors of PJSC Novatek, which is the majority owner of Arctic LNG 2 "and a vital asset to Russia's future as an energy superpower," were sanctioned. The directors include: Lev Vladimirovich Feodosyev, Valery Anatolyevich Kryukov, Viktor Gennadiyevich Nesterenko, Alexei Vitalyevich Orel, Irina Vernerovna Gaida and Alexander Yegorovich Natalenko. Oil-related sanctions from the UK have targeted oil trader Niels Troost and his company Paramount Energy & Commodities, "which facilitate[s] unfettered trade in Russian oil beyond the reach of the Oil Price Cap," according to the UK government. Shipping companies Fractal Marine DMCC and Active Shipping, have also been sanctioned for "business in the Russian energy sector as part of Putin's shadow fleet". source : www.rivieramm.com

ENI: FIRST LNG CARGO FOR CONGO FLNG

"With the first cargo, the Republic of the Congo enters the group of LNG exporting countries," company says. The first LNG cargo is currently being loaded on to a GasLog LNG carrier and will sail to Italy's Piombino regasification terminal. The Congo LNG project, sanctioned in December 2022, came on stream after just a year, in line with the project's initial timeline. The project, situated within the Marine XII permit, will achieve a plateau gas liquefaction capacity of approximately 4.5 billion cubic metres per annum and will mark zero flaring from operated activities in country, according to Eni. The Italy-headquartered oil and gas major announced the project's launch in the Republic of Congo in April 2023 with the nation's president and the company's chief executive on hand for a cornerstone laying ceremony at the site of the country's first natural gas liquefaction facility. Congo LNG will exploit the extensive gas volumes located in the Marine XII block using two floating LNG facilities offshore Congo. According to Eni, the gas coming from the field will serve domestic energy generation supply needs as well as turning the Republic of Congo into a natural gas exporter. The project has two stages centred around FLNGs. In the first stage, the Tango FLNG Eni acquired from Exmar in August 2022 was converted. The FLNG has a capacity to produce 0.6M tonnes per year (mta). Eni said production began in December 2023, and the company has secured a floating storage unit from Exmar on a 10-year charter, which will be based on a converted LNG carrier. Built in 2017, the barge-like Tango FLNG has a storage capacity of 16,100 m³ and liquefaction capacity of up to 0.6 mta. In the first phase, Eni is targeting nearshore

development: positioning Tango FLNG, the gas pretreatment plant, installing an additional platform and drilling 12 wells. The second phase of the project's offshore development will position a second FLNG, install eight additional platforms and drill 29 wells. The second FLNG plant is a newbuild which will provide an additional 2.4 mta in gas production, bringing the total production capacity for the project to 3 mta. Eni awarded the building contract for the unit to Wison (Nantong) Heavy Industry shipyard. The newbuild 2.4-mta floating FLNG vessel will come online in 2025, according to Eni, and will have an overall length of 380 m, beam of 60 m and depth of 35 m. It will be moored using a submerged swivel yoke system in about 40 m water in the Nene Marine Field area, about 50 km offshore from Congo's port city Pointe Noire. It will be able to store more than 180,000 m³ of LNG and 45,000 m³ of LPG. Algeria, Cameroon, Egypt, Equatorial Guinea and Nigeria are already exporters of LNG to Europe and Asia, but more LNG will be needed by the mid-2020s to meet global demand, according to forecasts. source : www.rivieramm.com

VESSELSVALUE: JAPAN REMAINS TOP LNG CARRIER OWNER

Japan owns the world's most valuable fleet of liquefied natural gas (LNG) carriers, and the nation is followed by Greece and China, according to the newest data by VesselsValue. The value of the Japanese LNG fleet stands at \$37.8 billion as of February 2024, Veson Nautical's VesselsValue said on Tuesday. Also, the value of the Japanese LNG fleet rose from \$30.3 billion since VesselsValue's last report in November 2022. Out of the top ship owning countries, Japan owns the highest value fleets for LNG and LPG vessels by both value and by volume at 202 LNG vessels and 344 LPG carriers, it said.

Japan's MOL and NYK both have huge LNG fleets.

Greek LNG fleet, which was first in 2021, has a value of \$31.1 billion while China's LNG fleet is worth \$21.1 billion. In terms

Country	Grand Total (USD mil)	Bulker	Tanker	Container	Small Dry	LNG	LPG	OSV	OCV*	MODU	Vehicle Carrier	RORO	Reefer	Renewable*	Cruise
Japan	\$206,389	\$56,116	\$38,409	\$26,406	\$7,248	\$37,839	\$13,412	\$63	\$57	\$296	\$22,885	\$1,603	\$600	\$30	\$1,426
China	\$204,010	\$57,193	\$47,440	\$42,602	\$7,516	\$21,152	\$8,001	\$3,024	\$951	\$5,588	\$6,532	\$90	\$166	\$71	\$3,684
Greece	\$169,391	\$49,506	\$69,510	\$10,152	\$391	\$31,129	\$5,815	\$340	\$152	—	\$1,896	\$97	\$118	\$0	\$287
USA	\$99,862	\$5,362	\$14,733	\$3,311	\$317	\$3,776	\$1,711	\$9,373	\$2,915	\$4,777	\$1,592	\$2,524	\$81	\$115	\$49,277
Singapore	\$85,654	\$15,370	\$25,567	\$22,131	\$1,473	\$2,004	\$9,338	\$3,693	\$1,591	\$1,646	\$2,574	\$22	\$183	\$50	\$10
South Korea	\$67,018	\$9,987	\$13,345	\$11,670	\$1,429	\$18,701	\$3,913	\$18	—	—	\$7,548	\$188	\$203	\$0	\$16
Norway	\$59,344	\$4,572	\$11,149	\$1,375	\$1,627	\$14,229	\$4,505	\$3,388	\$3,727	\$4,647	\$9,206	\$51	\$77	\$26	\$766
UK	\$53,832	\$5,016	\$7,158	\$8,314	\$437	\$2,933	\$5,018	\$1,023	\$942	\$6,311	\$2,040	\$487	\$79	\$446	\$13,629
Germany	\$49,486	\$7,661	\$4,705	\$17,810	\$5,866	\$1,077	\$1,662	\$117	\$134	—	\$247	\$121	\$62	\$88	\$9,935
Hong Kong, China	\$44,715	\$13,001	\$9,078	\$10,396	\$2,237	\$4,268	\$2,015	\$187	\$152	\$527	\$2,751	\$10	\$37	\$3	\$53

Source: VesselsValue, a Veson Nautical solution, as of February 2024. Includes CT, RVB. *Includes Well Stimulation, Liftboat, Dive Support, Maintenance and Support and MPSV only.

of overall fleet value, Japan continues to lead, taking number one spot owning the highest valued fleet and, holding a total of about \$206.3 billion in assets, VesselsValue said. This is an increase of 5 percent since the last report in November 2022.

China has the largest number of vessels

China maintains its top position by vessel ownership, boasting a total of 6,084 vessels and a current fleet value amounting to \$204 billion, VesselsValue said. The country owns the largest bulker fleet, both in terms of vessels and values, and also owns the largest number of tankers and containers. Greece has maintained its position as the third-ranked country by both total number of vessels in its fleet and overall value. The country is also the owner of the second largest LNG fleet, with 143 vessels, VesselsValue said. source : www.lngprime.com

CEDAR LNG FID PUSHED BACK

Canada's Pembina Pipeline and the Haisla Nation have again postponed a final investment decision on their Cedar floating LNG export project. Pembina and the Haisla Nation each own 50 percent in the Cedar LNG project. The two firms previously moved the final decision on the LNG export project from the fourth quarter of 2024 to the first quarter of this year. In January, the partners confirmed they had selected Samsung Heavy Industries and Black & Veatch to provide engineering, procurement, and construction for Cedar LNG's floating LNG production unit. Cedar LNG said in a recent update it has completed several "key" project deliverables, including obtaining material regulatory approvals, advancing inter-project agreements with Coastal GasLink and LNG Canada, and executing the EPC agreement. "Though numerous milestones have been achieved, a number of schedule-driven, interconnected elements require resolution prior to making a final investment decision, including binding commercial offtake, obtaining certain third party consents, and project financing," it said. Cedar LNG said that FID is now expected "in the middle of 2024". The \$2.4 billion FLNG project will have a capacity of about 3 mtpa and will source natural gas from the prolific Montney resource play in northeast British Columbia. Moreover, Cedar LNG plans to receive feed gas from the Coastal GasLink pipeline, which will supply the giant Shell-led LNG Canada export plant near Kitimat. The floating LNG facility will also be located near the LNG Canada plant and will be powered by renewable electricity from BC Hydro. source : www.lngprime.com

HYUNDAI SAMHO TO BUILD LNG CARRIER QUARTET FOR \$1.08 BILLION

South Korea's Hyundai Samho has secured an order to build four liquefied natural gas (LNG) carriers for about \$1.08 billion. Hyundai Samho's parent HD Korea Shipbuilding & Offshore Engineering said on Monday that the shipbuilder will build the vessels for an unidentified owner in Oceania. Moreover, the delivery of the four LNG carriers is expected to be completed by January 2028. HD KSOE said the contract is worth about 1.43 trillion won or some \$1.08 billion. The price tag of some \$270 million per vessel is a new record for a single 174,000-cbm LNG carrier. Shipbuilding sources told LNG Prime on Monday that Evangelos Marinakis-led Capital is likely behind the order for these vessels. Capital Gas already has LNG carriers on

order at Hyundai Samho and also Hyundai Heavy. In January, New York-listed Capital Product Partners took delivery of its latest LNG carrier from Hyundai Heavy. This is CPLP's ninth LNG carrier out of 18 it purchased from its sponsor Capital Maritime and all of these vessels are managed by Capital Gas. Prior to this new order, Hyundai Samho won a contract worth about \$955 million from Qatari LNG shipping giant Nakilat. Under this deal, Hyundai Samho will build two LNG carriers with a capacity of 174,000 cbm, while the four very large LPG/ ammonia gas carriers will each have a capacity of 88,000 cbm. HD KSOE and its units won in total six orders for LNG carriers this year. Including this new order, HD KSOE has so far received orders for 46 ships, including 1 offshore unit, worth \$5.98 billion, which is 44.3 percent of its annual order target of \$13.5 billion. source : www.lngprime.com

KOSMOS: BP'S TORTUE PROJECT TO PRODUCE FIRST LNG IN Q4

BP's delayed Greater Tortue Ahmeyim FLNG project, located offshore Mauritania and Senegal, is now expected to start producing liquefied natural gas in the fourth quarter of this year, according to project partner Kosmos Energy. Kosmos revealed the new delay in its fourth quarter and full year 2023 results report on Monday. In November 2023, the US firm said in its third-quarter results report that the delivery of first gas from the first phase of BP's Greater Tortue Ahmeyim FLNG project has the potential to slip into the second quarter of 2024 due to delays with the subsea scope. "The critical path to first gas, expected in the third quarter of 2024, continues to be through the arrival, hookup, and commissioning of the FPSO," Kosmos said on Monday. "Timely execution of this workstream is expected to allow for first LNG in the fourth quarter," it said. BP recently said that Golar LNG's converted FLNG, Gimi, arrived at the site of the Greater Tortue Ahmeyim project, but it did not provide an update regarding the commissioning of the project. Last month, Golar said that the FLNG, which was converted from a 1975-built Moss LNG carrier with a storage capacity of 125,000 cbm, has arrived at the site. However, Golar and BP have agreed that the FLNG "will proceed to moor offshore Tenerife while awaiting completion of the necessary preparatory activities," Golar said at the time. The FLNG departed Seatrium's yard in Singapore on November 19. The unit is at the heart of the GTA Phase 1 development, operated by BP with partners, Kosmos Energy, PETROSEN, and SMH. Kosmos said in the update that hookup work for the FLNG was underway.

FPSO in Tenerife

As per the project's FPSO unit, it left Cosco Shipping Heavy Industry's yard in Qidong, China in January last year. With eight processing and production modules, the FPSO will process around 500 million standard cubic feet of gas per day. Kosmos previously said the FPSO was expected to arrive on location in the first quarter of 2024. The firm said in the update that the vessel "is currently in a shipyard in Tenerife for inspection and repair of the fairleads." "Completion of this work and transit to the project site is expected early in the second quarter ahead of final hookup and commissioning," it said.

Subsea work to be completed in Q2

In October last year, BP selected Swiss-based offshore contractor Allseas to complete the remaining subsea pipelay scope for the FLNG project, replacing previous contractor Houston-based McDermott. Allseas said in December that it has started GTA offshore pipelay work using what it says is the world's largest construction vessel, Pioneering Spirit. Allseas' offshore construction support vessel Oceanic is providing installation support. The offshore contractor said last week it has completed the infield pipelay scope for the project. It said that Pioneering Spirit would conclude the offshore works by installing the six outstanding flowline termination assemblies. Kosmos said in the update that it expects completion of the subsea work at the end of the second quarter. source : www.lngprime.com

FSRU ARRIVES AT NFE'S BARCARENA TERMINAL IN BRAZIL

The 160,000-cbm FSRU, Energos Celsius, has arrived at New Fortress Energy's terminal in Barcarena, Brazil following a trip from Singapore. The converted FSRU, owned by Apollo's Energos Infrastructure, left Seatrium's yard in Singapore in December last year. US LNG player NFE announced the arrival of the unit in Barcarena, Para state, Brazil, in a social media post on Friday. According to Wes Edens-led NFE, the Barcarena terminal is the first regasification terminal in the North of Brazil and will serve as the sole natural gas supply source for this region, bringing "cleaner and more affordable" energy to the Amazon. NFE did not provide further information. It appears that the FSRU is laden. The 2013-built vessel, previously known as Golar Celsius, is on long-term charter to NFE in Brazil. Energos Celsius has a nominal regasification capacity of 750 million standard cubic feet per day (mmscfd), up to a maximum capacity of 1,000 mmscfd.

Barcarena terminal and power plant

NFE said in August last year it completed the 3 mtpa Barcarena terminal worth about \$700 million and the firm planned to ship first gas supplies to Norsk Hydro at the end of 2023. Besides an FSRU, the terminal located at the mouth of the Amazon River in Para includes a jetty, a three kilometers long pipeline, and a gas conditioning station that will initially serve Norsk Hydro. In December 2021, NFE and Norsk Hydro finalized a 15-year deal to supply regasified LNG to the Alunorte alumina refinery in Brazil. NFE is also also building the 605 MW Barcarena power plant and this facility will also receive regasified LNG from the Barcarena terminal and deliver power under 25-year power purchase agreements linked to JKM. In November, NFE secured financing to complete construction of the Barcarena power plant, which is more than 37 percent complete. The power plant, located adjacent to NFE's LNG import terminal, is "on schedule" to start operations in the third quarter of 2025 under a 25-year PPA with several electricity distribution companies in Brazil, it previously said. Besides the Barcarena facility, NFE said in November that its LNG import terminal in Santa Catarina, Brazil would start commercial operations in January 2024. NFE has executed a definitive deal to charter the 138,250-cbm FSRU Energos Winter from Brazil's state-owned energy

firm Petrobras starting in December 2023. This FSRU, also owned by Energos Infrastructure, will serve the Santa Catarina terminal. source : www.lngprime.com

TECHNIP ENERGIES BAGS ADRIATIC LNG GIG

Paris-based LNG engineering giant Technip Energies has secured a new contract from Italy's Adriatic LNG, the operator of



the offshore gravity-based LNG import terminal in the Adriatic Sea. Technip Energies said in a social media post on Monday it has secured the contract for the overhaul of the terminal's last two offshore LNG loading arms. According to the firm, Adriatic LNG has been the world first offshore LNG regassification terminal using its loading arms equipped with the targeting system, designed to maximize the availability of the loading arms regardless of the metocean conditions.

Adriatic LNG launched an overhaul program of the LNG loading arms in 2019. Technip Energies proposed a plug and play solution, while sequencing the refurbishment of the loading arms, to allow minimizing drastically the downtime of the LNG terminal, it said. The firm did not provide the price tag of the new contract. Launched in 2009, the world's first offshore gravity-based LNG import terminal sits about 14 kilometers offshore of Porto Levante and has regasification capacity of about 9 bcm per year. In March 2023, Adriatic LNG received its 1000th cargo of LNG since 2009. ExxonMobil has a 70.7 percent stake in Adriatic LNG, while QatarEnergy holds 22 percent and Snam owns 7.3 percent. source : www.lngprime.com

TELLURIAN AMENDS DEBT TERMS TO SUPPORT SALE OF ITS UPSTREAM ASSETS

US LNG firm Tellurian, the developer of the Driftwood LNG project in Louisiana, said it had signed a deal to amend the terms of certain debt instruments in order to boost near-term liquidity and provide the company with flexibility to complete the sale of its upstream assets. Among other items, the amendment provisions include a reduction in Tellurian's minimum cash balance requirement and the ability for the company to make its upcoming interest payments in-kind, according to a statement by Tellurian. The firm said in a separate SEC filing that it has entered into a letter agreement with an institutional investor

providing for, among other things, amendments to the indentures governing its 10.00% senior secured notes due 2025 and its 6.00% secured convertible notes due 2025 previously issued to the investor. The deal allows Tellurian to reduce its minimum liquidity requirement from \$40 million to \$25 million from February to through and including April 30, 2024. Also, Tellurian agreed to provide a “non-recourse pledge of all of its equity interests in Driftwood LNG Holdings and a certain intercompany note to secure the obligations under the indentures governing the notes.” CEO Octavio Simoes said this amendment to “our debt agreement is pivotal towards establishing a sustainable capital structure and accelerating our strategic priority, Driftwood LNG.” “It also provides us the time and flexibility to complete the sale of our upstream assets in a manner that maximizes value for our shareholders while we maintain our focus on the intensive negotiations associated with the commercialization of Driftwood LNG,” he said. Earlier this month, Tellurian said it is exploring the sale of its Haynesville upstream assets as it works on securing financing for the first phase of its Driftwood LNG project worth about \$14.5 billion. Under the first phase, Tellurian aims to build two LNG plants near Lake Charles with an export capacity of up to 11 mtpa. However, the company is still working to secure financing for the project. Tellurian issued a limited notice to proceed to compatriot engineering and construction giant Bechtel in March 2022 and it said in August last year that Bechtel completed piling work for the first plant and also concrete pouring for all plant one compressor foundations. The firm recently also secured more time from the US FERC to complete the construction of its Driftwood LNG project. FERC said in a filing dated February 15 that both Driftwood LNG and the connecting pipeline have been granted an extension of time, until April 18, 2029. source : www.lngprime.com

FLEX NETS LNG CARRIER CHARTER EXTENSION

Norwegian shipping firm Flex LNG, the owner of 13 liquefied natural gas carriers, has secured a time charter extension for its vessel, Flex Courageous. The shipping firm controlled by billionaire John Fredriksen said on Friday that the charterer of the 2019-built 173,400-cbm LNG carrier had exercised its first extension option. Flex said the charter is a “super major”. UK-based energy giant BP is the charterer of this vessel, as well as of the 2020-built 173,400-cbm LNG carrier, Flex Resolute, which recently secured a charter extension. Flex Courageous was fixed on a three-year time charter on November 1, 2021, together with Flex Resolute, starting in February 2022. Under the deal, the charterer had options to extend the period by up to four additional years in two-year periods. Following this first option declaration, Flex Courageous will be firm until first quarter of 2027, according to Flex. The charterer will then have a final option to extend the charter by another two years until 2029, it said. CEO Øystein Kalleklev said Flex has about 94 percent charter coverage for the remaining part of 2024, “so we remain well positioned with only one ship, Flex Constellation, coming open during the second quarter which is usually when the freight market starts to tighten again after the seasonal adjustment coming out of the winter.” Flex said in January that the 2019-built 173,400-cbm, Flex Constellation, will be available for charter later this year after a trading house decided not to utilize its extension option. source : www.lngprime.com

US WEEKLY LNG EXPORTS REACH 26 CARGOES

US liquefaction plants shipped 26 liquefied natural gas (LNG) cargoes in the week ending February 21, while natural gas deliveries to these terminals decreased compared to the week before. The US EIA said in its weekly natural gas report that 26 LNG carriers departed the US plants between February 15 and February 21, the same as in the week before. Citing shipping data provided by Bloomberg Finance, the agency said the total capacity of these LNG vessels is 97 Bcf. Natural gas deliveries to US terminals down 1.4 percent Average natural gas deliveries to US LNG export terminals decreased by 1.9 percent (0.3 Bcf/d) week over week, averaging 13.6 Bcf/d, according to data from S&P Global Commodity Insights. Natural gas deliveries to terminals in South Louisiana decreased by 4.5 percent (0.4 Bcf/d), to 8.7 Bcf/d, while natural gas deliveries to terminals in South Texas increased by 4.6 percent (0.2 Bcf/d) to average 3.5 Bcf/d. The agency said that natural gas deliveries to terminals outside of the U.S. Gulf Coast were essentially unchanged week over week at 1.2 Bcf/d. Cheniere's Sabine Pass plant shipped nine cargoes and the company's Corpus Christi facility sent four shipments during the week under review. Sempra Infrastructure's Cameron LNG terminal shipped four cargoes while Venture Global's Calcasieu Pass LNG terminal and the Freeport LNG terminal each shipped three cargoes during the period. Also, the Elba Island terminal sent two LNG cargoes and the Cove Point LNG terminal shipped one cargo, the agency said.

Henry Hub climbs to \$1.60/MMBtu

This report week, the Henry Hub spot price rose 9 cents from \$1.51 per million British thermal units (MMBtu) last Wednesday to \$1.60/MMBtu this Wednesday. The price of the March 2024 NYMEX contract increased 16.4 cents, from \$1.609/MMBtu last Wednesday to \$1.773/MMBtu this Wednesday. According to the agency, the price of the 12-month strip averaging March 2024 through February 2025 futures contracts climbed 19.1 cents to \$2.608/MMBtu.

TTF averaged \$7.75/MMBtu

The agency said that international natural gas futures decreased this report week. Bloomberg Finance reported that weekly average front-month futures prices for LNG cargoes in East Asia fell 77 cents to a weekly average of \$8.65/MMBtu. Natural gas futures for delivery at the Dutch TTF fell 51 cents to a weekly average of \$7.75/MMBtu. In the same week last year (week ending February 22, 2023), the prices were \$15.34/MMBtu in East Asia and \$15.64/MMBtu at TTF, the agency said. *Source :*

www.lngprime.com

DOE'S PERMIT PAUSE WILL NOT SLOW DOWN CHENIERE'S LNG EXPANSION PLANS

US LNG exporting giant Cheniere is going "full steam ahead" with plans to expand its Sabine Pass and Corpus Christi LNG terminals despite a recent move by the Biden administration to pause pending decisions for LNG export terminals, according to Cheniere's CEO, Jack Fusco. The Biden administration and the Department of Energy (DOE) announced last month, that the DOE will temporarily pause review and approval of all new and pending applications for export authorization to non-free trade agreement (non-FTA) countries while DOE updates its assessment process. "While this decision does not currently

impact our expansion projects or our FERC processes at Sabine Pass and Corpus Christi, it does introduce regulatory and permitting uncertainty into the US LNG industry as a whole,” Fusco said on Thursday during Cheniere’s 2023 results call.

“I firmly believe that a fair and transparent regulatory framework is essential for the future development of natural gas infrastructure in the United States, particularly liquefaction capacity, given the scale of investment, commercial support, and time required to bring these projects online,” he said. Fusco said the company believes it would secure all necessary regulatory approvals for Corpus Christi mid-scale trains 8 and 9, and the SPL expansion project within its expected timelines, as “we have for more than a decade under multiple administrations.” “To be clear, the DOE action has not slowed down our expansion projects at either site. We are full steam ahead on Corpus Christi trains 8 and 9 and the SPL expansion project development. We expect to file the FERC application for SPL very soon, and Corpus Christi trains 8 and 9 are in advanced stages in the FERC approval process,” he said. Fusco said the environmental assessment for trains 8 and 9 is scheduled for receipt by the end of March, and the company just received a letter of determination from PHMSA, a key agency in the FERC process last week. “We remain confident that our previous timelines won’t be materially impacted and we will maximize the efficiency with having Bechtel on site already through Stage 3,” he said.

FIDs in 2025 and 2026?

Cheniere is the largest LNG exporter in the US. The company’s Sabine Pass facility in Louisiana currently has a capacity of about 30 mtpa following the launch of the sixth train in February 2022, while Cheniere’s three-train Corpus Christi plant in Texas can produce about 15 mtpa of LNG and is undergoing expansion to add more than 10 mtpa of capacity. Cheniere’s unit Corpus Christi Liquefaction said in the December construction report filed with the US FERC that overall project completion for the Stage 3 project is 51.4 percent. The company expects to achieve first LNG production from the first train at the end of 2024. Besides this expansion, Cheniere plans to build two more liquefaction trains as part of the third expansion phase at the Corpus Christi plant. The firm’s results show that it aims to take a final investment decision on CCL midscale trains 8 and 9 in 2025, subject to regulatory approvals. In addition, Cheniere also aims to build two new liquefaction trains as part of the Sabine Pass Stage 5 expansion project to add up to 20 mtpa of capacity to the giant facility. Cheniere plans to take FID on this project in 2026, subject to regulatory approvals. Source : www.lngprime.com

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